

REMARKS

Claims 1, 3-6 and 9 are pending in the present Application. No claims have been canceled, claims 1 and 9 have been amended, and no claims have been added, leaving claims 1, 3-6 and 9 for consideration upon entry of the present Amendment.

Claim 1 has been amended to better define the invention. Support for this amendment can be found at least at page 5, lines 3-11, and throughout the specification.

Reconsideration and allowance of the claims are respectfully requested in view of the above amendments and the following remarks.

Claim Objections

Claims 1, 3-6 and 9 are objected to because of the following informalities:

- a. Claim 1 (claims 3-6 and 9 dependent therefrom) recites "KCTC 040-6 BP." It should be ---KCTC 0406BP--- according to the deposit receipt provided by the applicants on 7/22/2009.
- b. Claim 1 (claims 3-6 and 9 dependent therefrom) recites step of "subjected the permanently..." It should be ---subjecting the permanently... --- to improve format of claim 11.
- c. Claim 1 (claims 3-6 and 9 dependent therefrom) recites "prepared by the method comprising" and because additional unrecited steps are encompassed by the claim, i.e., the claim is not necessarily limited to the recited steps, it is suggested that the noted phrase be amended to recite, e.g., "prepared by a method.
- d. Claim 1 (claims 3-6 and 9 dependent therefrom) recites "a *Pseudomonas* sp. HJ-2 strain (Accession No. KCTC 040-6 BP)" and since the strain is limited to Accession No. KCTC 040-6, in order to substantially improve the claim form, it is suggested that the noted phrase be amended to recite, e.g., "the *Pseudomonas* sp. HJ-2 strain deposited as Accession No. KCTC 040-6".
- e. Claim 9 is objected to in the recitation of "culturing...with supply of heptanoic acid" and in order to improve the claim form, it is suggested that the noted phrase amended to recite, e.g., "culturing...with heptanoic acid."

(Office Action dated 3/17/2010, page 3)

With regard to objection a., claim 1 has been amended to recite ---KCTC 0406BP---, as suggested by the Examiner.

With regard to objection b., claim 1 has been amended to recited ---subjecting the permanently...---, as suggested by the Examiner.

With regard to objection c., claim 1 has been amended to recite "wherein the method comprises the following steps ..." Applicants believe this amendment addresses the Examiners

objection.

With regard to objection d., claim 1 has been amended as suggested by the Examiner.

With regard to objection e., claim 9 has been amended as suggested by the Examiner.

In view of the amendments to claim 1, Applicants respectfully request reconsideration and withdrawal of the objections.

Claim Rejections Under 35 U.S.C. § 102(b)

Claims 1, 3-6 and 9 stand rejected under 35 U.S.C. § 102(b), as allegedly anticipated by Kim et al. (KR 10-1999-0080695)(hereinfter “Kim”). (Office Action dated 3/17/2010, page 5) Applicants respectfully traverse this rejection.

To anticipate a claim, a reference must disclose each and every element of the claim. *Lewmar Marine v. Varient Inc.*, 3 U.S.P.Q.2d 1766 (Fed. Cir. 1987).

Kim fails to teach or suggest a method for ***exhibiting*** orientation-induced rubber-elasticity and temperature-sensitive shape memory effects from the PHA. In other words, Kim fails to provide the teaching that the specific PHA block copolymer exhibits shape memory effects. Applicants note that such orientation-induced rubber-elasticity and temperature-sensitive shape memory effects can be exhibited only when steps (c) through (e), as defined in the present invention, are performed in order.

Further, as admitted by the Examiner, Kim discloses the processes corresponding to only portions of steps (c) and (d). Specifically, Kim fails to disclose that the permanently deformed particular shaped PHA block copolymer is subjected to a constant external force at near room temperature for ***a predetermined period*** of time sufficient to form a PHA block copolymer having a temporary shape. That is, Kim teaches only “rubber elasticity,” i.e., the original shape is recovered when the stretching force is released from a stretched shape. This rubber elasticity is exhibited when the stretching force is applied during a relatively short time to the extent that a temporary shape as defined in the present invention cannot be formed.

Moreover, Kim fails to disclose the process of step (e). Since Kim fails to recognize the rubber-elasticity and temperature-sensitive shape memory effects of the PHA, Kim fails to provide that the PHA block copolymer having a temperature shape is heated to a temperature ranging from a glass transition temperature to a melting point thereof.

For these reasons, Applicants respectfully assert that the present invention is not

anticipated and having inventiveness over Kim. Applicants respectfully request reconsideration and withdrawal of the rejection of claims 1, 3-6 and 9 under 35 U.S.C. § 102(b).

It is believed that the foregoing amendments and remarks fully comply with the Office Action and that the claims herein should now be allowable to Applicants. Accordingly, reconsideration and allowance are requested.

If there are any additional charges with respect to this Amendment or otherwise, please charge them to Deposit Account No. 06-1130.

Respectfully submitted,

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